

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

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KAREN MARSHALL, PAUL FLANNERY	:
And DARRELL R. WHITE, on behalf of	:
themselves and all others similarly situated,	:
	:
Plaintiffs,	:
	:
v.	:
	:
HYUNDAI MOTOR AMERICA,	:
	:
Defendant.	: (REDACTED)
-----X	
-----X	
STEVE MILLER, RICHARD KOTELLY,	:
KATHLEEN RIORDAN, CHARLENE LIDDLE,	:
KRISTA PIERSKALLA and REBECCA	:
MCCORMICK, on behalf of themselves and	:
all others similarly situated	:
	:
Plaintiffs,	: Case No. 15-CV-04722 (CM),
	: 12-CV-03072 (CM)
v.	:
	:
HYUNDAI MOTOR AMERICA,	:
	:
Defendant.	:
-----X	

**PLAINTIFFS' OPPOSITION TO DEFENDANT HYUNDAI MOTOR AMERICA'S
MOTION TO EXCLUDE THE EXPERT TESTIMONY OF DR. RICHARD LYNCH**

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PRELIMINARY STATEMENT

Plaintiffs submit this opposition to Defendant Hyundai Motor America's ("HMA" or "Defendant") Motion to Exclude the Expert Testimony of Dr. Richard Lynch. For all of the reasons discussed herein, Defendant's Motion to Exclude Dr. Lynch should be denied.

INTRODUCTION

Dr. Lynch's testimony is offered in connection with Plaintiffs' class certification motion to demonstrate that there are common issues with regard to the breach of warranty, the GBL §349 unfair and deceptive trade practices claims and the parallel Pennsylvania UPTCPL claim. Dr. Lynch does not need to prove the existence of a design defect. He does not need to offer alternative designs or industry comparisons, calculate the number of vehicles HMA repaired, or opine on how long brake parts should last. Dr. Lynch's opinions that the Sonata brakes have common materials and suffer from a uniform materials defect within the Warranty period that HMA did not repair are well supported. At this stage of the litigation, Dr. Lynch's Report is submitted to demonstrate that class certification is warranted. The Report demonstrates common questions for the jury and is admissible for that purpose as set forth herein, including that HMA sold vehicles to class members that they knew or should have known were similar in materials and uniformly defective in connection with the claim that HMA is liable for a breach of the Warranty and whether HMA is liable for unfair and deceptive trade practices.¹ Dr. Lynch has the requisite experience in metallurgy and the design and production of automobile components to provide these opinions on the basis of reliable evidence. HMA's Motion to Exclude the Expert Testimony of Dr. Lynch should, therefore, be denied.

DR. LYNCH'S EXPERT REPORT

¹ The term "Warranty" refers to the 60,000 mile/5 year New Vehicle Warranty applicable to the Class Vehicles herein.

Dr. Lynch's is a metallurgist with PhD & MS degrees in Metallurgy and Materials Science, and a BS in Metallurgical Engineering, all from Lehigh University. See, Dr. Richard F. Lynch's Preliminary Expert Report on Corrosion of Defective Brake System Components Concerning Hyundai Sonata Model years 2006-2010 at App'x A ("Lynch Report," (Exh. "6" to Class Certification Motion, DKT No. 85)². He is knowledgeable in end product manufacture, materials processing and fabrication, surface treatments, material testing and forensic failure analysis. *Id.*, at p. 2. He has conducted hundreds of forensic failure analyses on a wide range materials, including metals, non-metallic materials, and coatings for corrosion protection. *Id.* His 45 years of professional experience include research and marketing positions with an automotive component producer, market development in corrosion resistance materials, and corrosion testing evaluation for metals and coatings. *Id.* Defendant does not challenge Dr. Lynch's qualifications in its motion

In this case, Dr. Lynch reviewed and evaluated extensive internal documents produced by HMA in discovery which support the finding of pervasive corrosion on the brake parts covered by Warranty and reviewed the inspection and analysis of other engineers on Plaintiffs' team of actual corroded brake parts on Class Vehicles. These include HMA's own analysis of the defect and admissions that this premature corrosion defect was common to the brake assembly parts covered by the Warranty, internal brake component testing, and work performed by experts retained by the Plaintiff. The documents supporting his opinions, analysis and conclusions include: (i) HMA's internal Quality Information Reports ("QIRs") and Field Service Engineering

² As certain Exhibits were already submitted on Plaintiff's Motion for Class Certification as Attachments to Declaration of Gary S. Graifman (Dkt. No. 85), Plaintiff refers to these exhibits as "Exh ____ to Class Cert Motion" and with regard to the exhibits submitted on Plaintiff's Reply in Support of Class Certification to the Reply Declaration of Gary S. Graifman (Dkt No. 122) as "Exh. ____ to Reply Class Cert Motion." New exhibits submitted herewith are referenced to as "Exh. ____ to Graifman Expert Decl."

Reports (“FSEs”) which analyzed the brake problems experienced in Class Vehicles and tested for causation (10, 11, 12)³; (ii) photographs from the vehicle inspections of two class representatives (Mr. Miller and Ms. McCormick) (15, 73); (iii) extensive consumer complaints reported in HMA’s complaint database of rusting, sticking/freezing brake parts (18, 20); (iv) the pre-release salt spray test reports from Hyundai’s brake component manufacturer, Mando (43); (v) the extensive inspection by Hyundai’s own affiliate, HATCI finding a common defect existed after testing numerous Class Vehicles (14); (vi) six additional HATCI reports analyzing the brake defect relating to corrosion (44, 45, 46, 47, 48, 49); (vii) various HMA and HATCI technical documents analyzing aspects of the brake defects at issue (29, 35, 50, 51); (viii) The inspections of Class Vehicles with the rusted brake parts done by Plaintiffs’ automotive engineering expert, Dave McLellan (“McLellan”), including photos McLellan took of those parts; (ix) The testing done by Plaintiffs’ forensic engineer, Eric Sullivan (“Sullivan”) analyzing why so many class members reported their calipers were seizing due to corrosion (notably, HMA does not contest Sullivan’s findings or report herein) (52); (x) depositions of Hyundai’s own engineers in Korea (26, 27); (xi) HMA’s own internal brake specifications indicating the relevant brake parts should last 184,411 miles (42); (xii) the invoices and dealer documents relating to analysis of the class representatives’ brake issues (62, 64, 66, 68, 70); (xiii) pertinent industry standards and treatises (36-41, 53, 54); and (xiv) the Excel spreadsheet of customer complaints and warranty claims for New York and Pennsylvania with approximately 5209 entries (55).⁴ Lynch Report, pp. 5-9.

³ The numbers in parenthesis relate to the documents identified in the list on pp. 5-9 of the Lynch Report.

⁴ While HMA in its Brief in Support of Motion to Exclude (“Defs. Br.”) characterizes these two exhibits (*i.e.*, Exh.’s 15 and 16 of Plaintiffs’ Class Certification Motion) as warranty claims made to the dealers, these clearly would have been the result of customer complaints and therefore, in

This mountain of inculpatory material, much of which are HMA's own documents, and some of which constitute an admission or statement against interest, provide a strong, reliable bases for Dr. Lynch's opinions that: (1) the Class Vehicles suffer from a common brake defect, (2) the materials used to manufacture the brake parts caused the brake defect, and (3) HMA knew or should have known about the defect.

In particular, it is striking that HMA argues that *it paid* approximately [REDACTED] [REDACTED] for the corrosion defect under warranty already (which equals a staggering [REDACTED] of Class Vehicles).⁵ If nothing else, this is an admission that the defect should have been covered under warranty, since there is no other way to explain why HMA would cover these claims under warranty unless they were recognized by HMA as a materials defect. Car companies are not known for willingly paying extensive warranty claims if they are otherwise not warrantable under the terms of warranty.

i. The Finding That The Class Vehicles Suffer From a Common Brake Defect Due to Corrosion.

Dr. Lynch reviewed and evaluated HMA's own internal information reports and field service evaluations, engineering evaluations and customer surveys produced by HATCI, and Mr. McLellan and Mr. Sullivan's study and testing of brake components in the Class Vehicles. On the basis of this plethora of information, he concluded that the Class Vehicles suffer from a

Plaintiffs' view, constitute *both* warranty claims paid *and* customer complaints about the corroded brakes. Regardless, they are clearly manifestations of the defect extensively appearing on Class Vehicles and acknowledged by HMA as a materials defect since Defendant did, in fact, cover approximately [REDACTED] claims for PA and NY Class Vehicles under warranty thus constituting an admission that the premature corrosion defect constitutes a materials defect covered under the warranty. Despite this evidence, HMA has taken a contrary position in this litigation.

⁵ See "TOTAL RECALL: Despite quality improvements, continue to dog automakers" *Automotive News*, October 28, 2013, p. 3, noting that one major car manufacturer considers a tolerance level of 0.05 percent, with any defect with a higher incidence rate being escalated for a closer review. Exh. "8" Graifman Expert Decl.

uniform materials defect leading to premature corrosion and brake failure which includes squealing, grinding, pulsation and/or judder affecting a vehicle's drivability and resulting in: (1) failure of the brake rotor disk due to the corrosion on the rotor surfaces; (2) seizure of the brake pad slider clips and carriers due to corrosion (causing the pads to become immobilized); and (3) seizure of the brake caliper pistons due to corrosion that binds and freezes the caliper pistons. *See, Haag* Dep. of Richard F. Lynch taken July 28, 2016 ("Lynch *Haag* Dep."), 37:11-39:5, 39:15-24, 48:23-50:2, 50:3-8, 50:15-52:6, 55:2-6, 59:5-17, 59:23-60:4, 63:11-23, 106:7-11, 113:16-114:9, *See* Exhibit "12" to the Graifman Expert Decl.; *see also* Lynch Report, p. 4.⁶

Dr. Lynch's opinion that the brake defect first manifests in a squeal or grinding noise is supported by the substantial number of Warranty claims associated with "pulsation/judder" or "noise[.]" Sept. 5, 2007 Quality Information Report ("QIR"), Exh. "20," to Class Cert Motion, at HMAM_004875 ("Sept. 2007 QIR"), and a [REDACTED] of respondents reported that their vehicles "presented morning squealing noise, primarily from the rear brakes." HATCI Engineering Evaluation, Document 4 – NF Rear Caliper Benchmarking, Jan. 11, 2007, HATCI_000036-74 at 000041 ("HATCI Benchmarking"), annexed as Exh. "13" to Graifman Expert Decl.

Dr. Lynch also relied on the HATCI Technical Report analyzing 22 vehicles with corroded brakes (11 Sonatas and 9 Santa Fes) that contained descriptions and attached files of sound recordings of the grinding, rubbing, and scrapping noises due to corrosion-induced, uneven contact of the brake pad to the disc and metal-to-metal contact. HATCI Report, Exh. "4" to Class Cert Motion ("HATCI Report"). The HATCI Report (14) was an in-depth analysis done

⁶ As Defendant's Brief notes (p. 4, n.2), the parties agreed to use the expert depositions taken in the *Haag* case here. The parties conducted further depositions in this case with regard to any new or different material. Therefore, references to the Haag depositions are preceded with the word "*Haag*." Depositions in this case, are preceded with the word "*Miller*".

by HMA's own engineers and, as such, was material reviewed which supported Dr. Lynch's findings. Dr. Lynch also reviewed a report where [REDACTED]

[REDACTED] HATCI Engineering Evaluation, NF Brake Noise Problem, Apr. 12, 2006, HATCI_000029-35 ("HATCI Brake Noise Evaluation"), annexed as Exh. "14" to Graifman Expert Decl.).

Dr. Lynch's opinion that the brakes in the Class Vehicles will develop judder or pulsation due to corrosion is confirmed by HMA's own conclusions based on the Sept. 2007 QIR's findings of judder and vibration from inspection of a defective 2006 Sonata; his review of HMA's [REDACTED] that included comments from the technicians and customers observing the corrosion of brake components and corresponding judder and vibration; and bar graph of codes indicating [REDACTED]

For his opinion that the corrosion progressed and eventually causes the seizure of the brake discs in Class Vehicles, Dr. Lynch relies on the results of salt chamber, chassis, dynamometer and road testing performed on Sonata vehicles by HATCI. HATCI Engineering Evaluation, NF Rear Caliper Suspension [Deflection] Chassis Dyno & Rad Testing, June 29, 2007, HATCI_000118 ("HATCI Caliper Evaluation"), annexed as Exh. "15" to Graifman Expert Decl.; HATCI Brake Noise Evaluation, annexed as Exh. "14" to Graifman Expert Decl. He further supported his opinions with [REDACTED]. Apr. 28, 2008 FSE, Exhs. "21" & "22" to Class Cert Motion at HMAM_002578, 002580 ("Apr. 2008 FSEs").

Dr. Lynch's opinion that the slider clips and carriers in Class Vehicles will prematurely seize and fail due to corrosion is supported, in part, by his review of two of HMA's own FSEs released by HMA in April 2008 (10, 11) and the HATCI Technical Report (14). From the April 2008 FSEs, Dr. Lynch noted [REDACTED]

[REDACTED] Dr. Lynch also reviewed photographs from the HATCI Technical Report (14) that showed 22 vehicles with s [REDACTED] [REDACTED] HATCI Technical Report.

Last, Dr. Lynch's opinion that corrosion of the piston and bore creates iron oxide in the Sonata, which fills the piston bore, and causes the piston to seize in the bore, Lynch Report, pp. 18-19, is based upon photographs and measurements of the brake components taken by Plaintiffs' two other experts, Mr. McLellan and Eric Sullivan of Intertek Industry Services, as well as chemical and mechanical testing these experts performed. Dr. Lynch opines, *inter alia*, that the brake components "failed due to inadequate materials selection which resulted in components that could not resist the normal corrosion conditions encountered in the northern and northeastern United States. . . . The spring clips, the carriers, the caliper housing, and the brake pad backings on the Class Vehicles in question, and the brake pistons are defective in that the materials used in these components do not account for such conditions as explained hereinbelow." (Lynch Report, p. 38, item 7).

In coming to this opinion, Dr. Lynch did not only rely on Defendant's documents. Plaintiffs' team of experts also physically investigated actual defective corroded brake parts on failed vehicles as set forth in the Reports of Dave McLellan and Eric Sullivan of Intertek.⁷

⁷ See, pp. 7-13 of Expert Report of Dave McLellan in Connection with Plaintiff's Motion for Class Certification, pp. 10, Exh. C, May 23, 2016 ("McLellan Report"), annexed as Exh. "1" to Graifman Expert Decl. and Intertek Industry Services Preliminary Evaluation of Hyundai Sonata

Ironically, HMA's own experts failed to inspect, analyze or review even one vehicle with corroded brake parts, thus resulting in an inability by them to opine on the defect or its cause. Dr. Lynch also assessed chemical testing done by Intertek with an Electron Dispersive Spectroscopy ("EDS"), which revealed large deposits of iron and oxygen consistent with the iron oxide observed on the bore of the exemplar seized caliper (Lynch Report, at pp. 21-22). He also relied on Intertek's load testing, designed to determine the tremendous amount of force necessary to move the exemplar seized caliper bore. Intertek Report, p. 8, 14. Dr. Lynch also bases his assessment that the corrosive materials fill the small space between the brake components and causes them to seize based on fingerprinting tests and measurements of rollback in corroded rear calipers by HATCI. Mar. 3 HATCI Caliper Lining Residue Evaluation (Exh. "16" to Graifman Expert Decl.).

ii. The Findings That Brakes in Class Vehicles Prematurely Corrode Because HMA Manufactured The Brake Components From Materials That Could Not Adequately Resist Corrosive Conditions.

As noted, Dr. Lynch concluded that the common corroded components he observed in HMA and HATCI reports and McLellan and Sullivan's inspections "failed due to inadequate materials selection which resulted in brake components that could not resist the normal corrosion conditions encountered in the Salt States." Lynch Report, p.4. Dr. Lynch supports his opinion by, first, identifying the materials HMA used to manufacture the brake components based on: (i) HATCI's observations from the salt spray testing and photographs taken at a micro level, HATCI Engineering Evaluation, NF Brake Residue Problem, Mar. 3, 2006, HATCI_000023 ("Mar. 3 HATCI Brake Residue Problem Evaluation"), annexed as Exh. "17" to Graifman Expert Decl.; (ii) HATCI Engineering Evaluation – NF Brake Pad Sticking Problem, Feb. 1,

Rear Brake Caliper, pp. 8-14, August, 2018 ("Intertek Report") (Exh. "25" to Class Cert Motion).

2006, HATCI_000005 (“Feb 1 HATCI Pad Sticking Evaluation”), annexed as Exh. “6” to Graifman Expert Decl.; (iii) HATCI Engineering Evaluation – NF Brake Pad Sticking Problem, Jan. 23, 2006, HATCI_000001 (“Jan 23 HATCI Pad Sticking Evaluation”), annexed as Exh. “19” to Graifman Expert Decl.; (iv) Mr. Sullivan’s EDS testing of the chemical makeup of the brake caliper; (vi) and deposition testimony of Hyundai’s own brake design engineers, Kisoo Lee and Gwang-Yun Kim. *See* Intertek Report, p. 10; Deposition of Kisoo Lee, 24:18 – 29:6, Oct. 15, 2015, Exh. “4” to Graifman Expert Decl. (“Lee Dep.”); Deposition of Gwang-Yun Kim, 75:13-20, Oct. 14, 2015 (“Kim Dep.”) (Exh. “5” to Graifman Expert Decl.). He identifies the material makeup of the components as follows: pad slider clips (stainless steel), pad ears (standard carbon steel), pad backing plate (painted steel), caliper housing (cast iron), rotors (cast iron), brake pistons (steel and chrome plating on the outside surface), and pads (polymeric material). Lynch *Haag* Dep., 39:15-24, 50:3-8, 55:2-6, 59:5-17, 59:23-60:4, 63:11-23. (Exh. “12” to Graifman Expert Decl.).

HMA’s own engineers confirmed that the covered brake parts [REDACTED] [REDACTED] based on the specifications prolonged by Hyundai Motor Corp. (“HMC”) or [REDACTED] [REDACTED] Lee Dep., p. 42 (Exh. “4” to Graifman Expert Decl.); *See* Hyundai Brake Specification, Exh. “18” to Class Cert Motion.

Dr. Lynch, next, opines that the materials, particularly in the brake pad, absorb water too easily, stick to the disc at high temperatures, and corrode the disc and rotors due to the adhesion of the wet brake pads to the rotors. Lynch Report, pp. 18-20. For his opinion, Dr. Lynch relies on [REDACTED]

[REDACTED]. 3 HATCI

Brake Residue Problem Evaluation.⁸ Dr. Lynch's observations that the brake pad adheres to the discs and rotors are supported by [REDACTED]. Mar. 3 HATCI Brake Residue Problem Evaluation; HATCI Engineering Evaluation, NF – Rear Caliper Lining Residue, Mar. 3, 2006, HATCI_000084 annexed to Exh. "17" to Graifman Decl.

Dr. Lynch's conclusion that the adhesion of the pads to the discs caused corrosion in the discs and rotor is based on [REDACTED]
[REDACTED]
[REDACTED]. HATCI Engineering Evaluation – NF Brake Pad Sticking Problem 1-23-2006 (No. 45) ("HATCI Pad Sticking Evaluation"), annexed as Exh. "6" to Graifman Expert Decl.

To support his conclusion that water infiltrates into the brake caliper components through the rubber seal on the caliper piston and corrodes the materials used to manufacture the caliper pistons and bore, thus seizing the piston, Dr. Lynch relies on photographs and measurements of the brake components, as well as chemical and mechanical testing performed by Mr. Sullivan and Mr. McLellan. Lynch Report, pp. 21-22. These photographs and the EDS analysis of the materials in a cross-cut of the brake system revealed corrosion deposits in the region between the piston seal and the piston dust boot. This supported his position that water entered the brake system through the seal and corroded the components. Intertek Report, p. 11-20.

Dr. Lynch opines that HMA could resolve the corrosion problem by changing the materials used in Class Vehicle brake components. Lynch Report, p. 17-19. See also, Lynch *Miller* Dep. at p. 78-79 annexed as Exh. "18" to Graifman Expert Decl. Moreover, Dr. Lynch relies on [REDACTED], to

⁸ Although this case is not about defective *brake pads*, which are covered by the limited 12 month/12,000 mile warranty, rather than the full 5year/60,000 mile warranty, excessive water retained in the brake pads creates higher levels of moisture which reinforce the premature corrosion of adjacent parts, such as the spring clips, holders and caliper.

support his opinion that HMA should manufacture a pad with a “non-urethane binder” that offers more water resistance typical of the industry.⁹

iii. HMA Knew or Should Have Known About The Defect.

Dr. Lynch easily supports his opinion that HMA’s own engineers and technicians knew or should have known about the brake defect at the time of sale by the 2006 dates of the aforementioned testing performed by HATCI based on revelation of reports by HMA [REDACTED] [REDACTED] Report, pp. 15-21.

Dr. Lynch also relies on the multitude of consumer complaints received by HMA, including those at its Customer Assistance Call Center (“CACC”) as early as 2008 (Exh. 19 to Class Cert. Motion) and those in the warranty claims database (Class Cert. Motion Exhs. 15 & 16). *See also*, CACC excerpts recited in Lynch Rep. at pp. 26-28.

Finally, Dr. Lynch bases his opinion as to HMA’s early knowledge of the defect on [REDACTED] [REDACTED] and the [REDACTED] [REDACTED] (12). *See*, Mando Salt Spray Component Testing, Nov. 18, 2004, HMCH_000867-880 (43). (“Mando Test”), Exh. “1” to Class Cert Motion and J. Vedder QIR, Exh “3” to Class Cert. Motion.

Contrary to Defendant’s assertion, Dr. Lynch also supported his conclusions and opinion with references to pertinent technical literature (Items 36-41 of list at p. 7; Lynch Rep., pp. 35-37).

STANDARD OF REVIEW ON CLASS CERTIFICATION MOTION

⁹ Dr. Lynch also relies on HMA’s own QIR urging the company to “consider adding more chromium in the brake disc alloy... [or] nitrate coating of the brake discs.” Sept. 2007 QIR.

As recognized recently by courts in this Circuit, the *Daubert* inquiry is limited at the class certification stage. “[C]ourts in this Circuit have applied its standard but found that the ***scope of the Daubert analysis is cabined by its purposes at this stage: the inquiry is limited to whether or not the expert reports are admissible to establish the requirement of Rule 23.***” *Royal Park Investments SA/NV v Deutsche Bank Natl. Tr. Co.*, 14-cv-4394 (AJN), 2018 WL 1750595, at *7 (S.D.N.Y. Apr. 11, 2018) (internal citations removed, emphasis added); *see also In re Visa Check/Mastercard Antitrust Litig.*, 192 F.R.D. 68, 77-78 (E.D.N.Y. 2000), *aff’d* 280 F.3d 124 (2d Cir. 2001) (finding plaintiff’s testimony admissible at class certification because “[t]he admissibility inquiry under *Daubert* and *Kumho Tire* must be adapted to the facts ... and to the stage of the proceedings.”); *Keegan v. Am. Honda Motor Co., Inc.*, 284 F.R.D. 504, 515 (C.D. Ca. 2012) (stating, in class action involving a vehicle defect that “[o]n a motion or class certification, it is not necessary for the expert witness to resolve factual disputes going to the merits of plaintiff’s claim or claims; instead the testimony must be relevant to determining ‘whether there was a common pattern and practice that could affect the class as a whole.’”); *In re Zurn Pex Plumbing Products Lia. Litig.*, 644 F.3d 604, 613 (8th Cir. 2011) (“The main purpose of *Daubert* exclusion is to protect juries from being swayed by dubious scientific testimony. That interest is not implicated at the class certification stage”). *See also, Merryman v. Citigroup, Inc.*, 15-cv-9185 (CM), 2018 WL 1621495 at *19-20 (S.D.N.Y. Mar. 22, 2018).

“[T]he rejection of expert testimony is the exception rather than the rule.” *Harrison v. Ford Motor Co.*, Case No. 11-0840, 2013 U.S. Dist. LEXIS 85137, at *23 (N.D.N.Y. June 18, 2013); *see also* Fed. R. Evid. 702, Advisory Committee’s Note. Courts permit expert testimony so long as it is “reliable” and “relevant[.]” *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 147 (1999) (citing *Daubert v. Merrell Dow Pharms.*, 509 U.S. 579, 589 (1993)).

To determine whether the expert's testimony reliably applies the principle and methods to the facts of a particular case, courts in this Circuit weigh: (1) whether the expert has developed their opinions expressly for the purpose of testifying or for research independent of the litigation; (2) whether the expert has "unjustly extrapolated from an accepted premise to an unfounded conclusion[;]" and (3) whether the expert has accounted for "obvious alternative explanations" for the problem at issue. *Northbrook NY, LLC v. Lewis & Clinch, Inc.*, Case No. 09-0792, 2012 U.S. Dist. LEXIS 134699, at *11-12 (N.D.N.Y. Sep. 20, 2012). Experts provide relevant testimony if "[t]he expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue." USCS Fed Rules Evid. R 702; *see also In re Fosamax Prods. Liab. Litig.*, 645 F. Supp. 2d 164, 173 (S.D.N.Y. 2009).

ARGUMENT

I. DR. LYNCH'S TESTIMONY IS RELIABLE AS HE RELIES ON SUFFICIENT FACTS AND DATA TYPICALLY RELIED UPON BY METALLURGISTS AND ENGINEERS, REASONABLY APPLIED HERE

A. Dr. Lynch Relies Upon Sufficient Technical Evidence Derived From Reliable Principles and Methods of Evaluation.

Defendant attempts to challenge Dr. Lynch's opinion by suggesting what, in Defendant's opinion, additional work he should have undertaken. To the extent, for example, HMA complains that Dr. Lynch "did not conduct any testing" (Defts. Br., p. 10), they ignore the extensive brake corrosion testing done by HMA of multiple Class Vehicles over a lengthy period of time and analyzed in the numerous QIRs and FSEs that HMA created as well as its HATCI Reports, and the physical examinations of failed corroded brake parts, which were inspected and analyzed by others of plaintiffs' expert team, Sullivan and McLellan.

"While testing of a prototype is undoubtedly one of the preferred methods for determining the reliability of an expert's opinion, *testing is not necessarily a requirement for*

the admission of expert testimony.” *Millman v. Mitsubishi Caterpillar Forklift Am., Inc.*, 594 F.Supp.2d 230, 239-40 (N.D.N.Y. 2009) (emphasis added); *See also, Colombo v. CMI Corp.*, 26 F.Supp.2d 574, 577 (W.D.N.Y. 1998) (admitting expert testimony despite expert’s lack of testing, prototypes or drawings); *Cruz v. Kumho Tire Co., Inc.*, 2015 WL 2193796 at *10 (N.D.N.Y. May 11, 2015) (“[A]lthough ‘defendant points out that Dr. Paul can offer no tests, and no prototypes or drawings of satisfactory machinery,’ in the court’s view, ‘these are precisely the kinds of matters that should be left for the jury to consider in assessing the weight to be given to Dr. Paul’s testimony.’” (internal citations omitted)).¹⁰

Such questions go to the weight of Dr. Lynch’s testimony and not its reliability. Based on the mountain of corroborating data and tests, Dr. Lynch concludes that the “common conditions existing in the brake assemblies on the Hyundai Sonata vehicles containing the brake parts described above, render all vehicles in the class susceptible to catastrophic sudden failure due to the use of insufficiently protected materials.” Lynch Report, p. 38, Item No. 6.

Dr. Lynch’s testimony is reliable because it is based on sufficient facts and data established using reliable principles and methods of evaluation. In the context of engineering testimony, experts “may rest on scientific foundations or on the personal knowledge or experience of the engineer,” and “extrapolate[ions] from existing data.” *Cedar Petrochemicals, Inc. v. Dongbu Hannong Chem. Co.*, 769 F. Supp. 2d 269, 284 (S.D.N.Y. 2011). So long as the

¹⁰ While Defendant complains that Dr. Lynch did not review competitors’ vehicles, such comparison is not only not required but is irrelevant because it is unknown by HMA’s expert, James Walker (i) what any of those other manufacturers’ failure rates are by comparison and (ii) whether those other manufacturers covered under warranty the brake corrosion which occurred during the warranty as a defect, which would be at direct odds with HMA’s position herein. Moreover, as Walker acknowledged, the brakes of those competitive vehicles had different designs, different packaging and different exposures, and could therefore not assist Walker in answering the question as to why HMA’s brakes corrode prematurely and frequently (Walker *Miller* Dep., pp. 22:17-23:5). Annexed to Graifman Expert Decl at Exh. “9”). Moreover, Walker himself testified that his prior employer, Ford, *did* cover brake corrosion during the basic warranty. Walker *Haag* Dep., p. 182 Graifman Expert Decl., Exh. “7.”

expert testimony is based upon “good grounds... it should be tested by the adversary process—competing expert testimony and active cross-examination—rather than excluded from jurors’ scrutiny for fear that they will not grasp its complexities or satisfactorily weigh its inadequacies.” *In re Fosamax Prods. Liab. Litig.*, 645 F. Supp. 2d, at 173.

As detailed above, Dr. Lynch based his analysis on sufficient facts and data which experts typically rely on and arrived at his opinions based on his “own review of documents and the results of testing[,]” and not “only on what the plaintiffs told them.” *Cedar Petrochemicals, Inc.*, 769 F. Supp. 2d, at 285. Even where the expert relies on testing “conducted by independent consultants[,]” rather than the expert himself, the facts and data provide sufficient evidence for the expert’s individual analysis. *Id.*, at 285. Dr. Lynch’s analysis of the evidence compiled by several independent sources – namely, HATCI, Mando, Mr. McLellan, Mr. Sullivan, and even HMA – provides a sufficient basis for his opinions that the covered brake components all suffer from a common materials defect in support of class certification.

Defendant further challenges Dr. Lynch’s report by claiming he did not “inspect a vehicle.” (Deft. Br. p. 10). Again, this is the type of mere “quibble” that the Second Circuit has held goes to the weight and credibility of an expert’s testimony rather than its admissibility “and, therefore, such issues are best explored during cross-examination.” *Millman, supra*, at 237 (citing to *McCulloch v. H.B. Fuller Co.*, 61 F.3d 1038, 1043 (2d Cir. 1995)). In support of its baseless claim, Defendant string cites to individual *personal injury* and *products liability* claims where the individual plaintiff was physically injured by an alleged failure of a specific product he used, thus basing the case on an individually unique event or series of events (*e.g.*, cases at Defts. Br., p. 11). In contrast, the focus of Dr. Lynch’s testimony, at this stage of the litigation (*e.g.*, class certification), is submitted to demonstrate common issues and not to necessarily

demonstrate one specific product failed to work on a given day, which caused a plaintiff physical injury. “While [the expert] may not have physically examined or tested [the vehicle] prior to writing his report, and while his opinion may not be grounded in a plethora of hard facts, data, studies, and scientific literature” is not a basis to exclude. *Figueroa v. Boston Scientific Corp.*, 254 F.Supp.2d 361, 368–369 (S.D.N.Y.2003); *See Lappe v. Am. Honda Motor Co., Inc.*, 857 F.Supp. 222, 228 (N.D.N.Y.1994) (expert's opinions may be properly grounded in the results of his investigation, observations, experience, calculations, examination of accident reports, legal documents, medical records, medical images, owner's manuals, comparable Honda Civics, an inspection of the accident site, accident vehicle, transcripts of witness depositions, reports from defendants' liability experts, numerous photos of the accident scene, and police and medical reports). Notably, Defendant's own expert, Walker, did not inspect even one sample of corroded brake components. Walker *Haag Dep.*, 43-44; Walker *Miller Dep.*, p. 28. In contrast, McLellan inspected, photographed and bench-tested multiple corroded brake parts from Class Vehicles.

In addition to the volumes of materials he reviewed which supported his opinion that extensive, pervasive corrosion in Class Vehicles is due to a common defect, Dr. Lynch confirmed the existence of corrosion produced by inadequate materials and design, by reviewing Mr. Sullivan's load testing which confirmed seizure of the exemplar caliper piston due to corrosion. In confirming the cause of the seizure, Dr. Lynch used his expertise to analyze HATCI's Fourier Transform Infrared Spectroscopy and EDS testing of the brake discs, rotors, and pads and Mr. Sullivan's EDS testing of the piston and bore (Intertek Report, p. 11-20), to conclude that corrosion in the form of iron oxide coats the components after they encounter corrosive conditions – namely, water, and causes seizure.

From his metallurgical background, Dr. Lynch knows that iron oxide takes up more space than the iron itself. Lynch Report, p. 21-22. Therefore, Dr. Lynch knew to review any measurements and photographs taken of the space between the corroding brake components to see whether the corrosive iron oxide caused the seizure of brake components by filling the space between the components. The measurements he assessed led him to conclude that the corrosion particles filled the space between brake components.

Mr. McLellan, likewise, observed measurements in the space between corroded pistons and bores in a sample Class Vehicle brake caliper and noted that the clearance between the piston and bore was lost due to the heavy corrosion. This corresponded to the symptoms of seized/frozen calipers [REDACTED] and to HMA's testing, which further [REDACTED] that were supposed to move (if operating properly), due to extensive corrosion failed to work long before the projected life of the part. That projected life based on HMA's own specification was [REDACTED]. McLellan Report, p. 10.

Similarly, HMA challenges the Lynch Report by further suggesting, inaccurately, that he must suggest "alternative" materials or designs which would be better. First, it is not required that he suggest an alternative. Second, HMA goes on to admit that he did in fact do so (Defts. Br.p. 12) such as adding more chromium, nickel, copper or silicone. *See also*, Lynch Miller Dep., pp. 78-79. However, as noted above, an expert is not required to develop alternate prototypes in support of his opinion as to the common cause of the corrosion here. *Cruz v. Kumho Tire, Inc.*, *supra*, at *10; *Colombo v. CMI Corp.*, *supra*, at 577. This is particularly true where Defendant itself came up with solutions as represented in the various [REDACTED] that HMA prepared and in the HATCI Report which [REDACTED]

[REDACTED]

[REDACTED]

Dr. Lynch takes the final step of analyzing how the caliper corrosion develops in the first instance – through the interaction of brake component materials with water that comes into contact with the components due to the failure of the boot seal to keep the water out. Lynch Report, pp. 18-19; Intertek Report, p. 11-20; McLellan Report, p. 8-9. As previously mentioned, Dr. Lynch reviewed the measurements of corrosion from brake pads at different distances from the brake disc and determined that corrosion will increase the closer the wet brake pads are to the brake rotor. Lynch Report, p. 18. Dr. Lynch determined that higher temperatures, like the ones achieved in brake systems, brake pads stick to the rotor, which exacerbates the corrosion. Lynch Report, p. 18. [REDACTED]

[REDACTED] notes that a change in material on the brake pad to absorb less water, or the rotor to better resist corrosion due to the water, would mitigate the corrosion. *Id.*, See also Mar. 3 HATCI Caliper Lining Residue Evaluation; Sept. 2007 QIR.

B. In Attacking The Factual Basis of Dr. Lynch’s Opinion, Defendant Is Forced To Attack Its Own Testing, Findings and Analysis.

HMA improperly challenges the Lynch Report by wrongly suggesting he merely offered a series of unsupported conclusions (Defts. Br., at I.B.). In fact, Dr. Lynch used his extensive metallurgical training to analyze, discuss and come to the opinion that the findings of HMA’s own documents were supported by verified facts, analysis and testing, and thereby supported his own findings. This, of course, was in addition to his review of the photographs provided by McLellan and Sullivan, the analysis by Sullivan and McLellan of brake parts taken from Class Vehicles where the defect manifested, and, *inter alia*, studying the [REDACTED]

[REDACTED]

[REDACTED]. This served as a proper basis for his opinions.

The rest of HMA's attack on his opinions (at Defts. Br. pp. 14-16) are mere quibbles with the underlying data upon which he supports his opinions. However, the data HMA attempts to attack are comprised of HMA's *own admissions, the findings and discussions of HMA's own engineers, HMA's own brake specifications* [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Last, the facts and data upon which Dr. Lynch relies are products of reliable principles and methods that Dr. Lynch himself has employed in his experience as a metallurgist and metallurgical engineer. A salt spray corrosion test, [REDACTED] [REDACTED] for example, represents a typical test performed on metals to determine whether they can sufficiently resist corrosion. *See* Lynch Report, p. 29; *see also Inland Fastener, Inc. v. S. Holland Metal Finishing Co.*, 2015 IL App (2d) 140947-U, ¶ 30. Moreover, the Electron Dispersive Spectroscopy, mechanical, and chassis and dynamometer testing that HATCI, Mr. McLellan, and Mr. Sullivan used to analyze Sonata brake components in their reports are the same techniques that metallurgists typically rely upon and reliable methods of testing. Lynch Report, p. 2; *Warner Chilcott Labs. Ir., Ltd. v. Impax Labs., Inc.*, Case No. 08-06304, 2012 U.S. Dist. LEXIS 60386, at *103 (D.N.J. Apr. 30, 2012) (finding EDS to be a "well-known, widely accepted analytical test methodology"); *Bullock v. Volkswagen Grp. of Am., Inc.*, 107 F. Supp. 3d 1305, 1312 (M.D. Ga. 2015) (finding "standard dynamometer correction factors" reliable); . The pictures taken by HATCI also provide reliable evidence of corrosion. *Engler v. MTD Prods.*,

No. 13-575, 2015 U.S. Dist. LEXIS 25138, at *34 (N.D.N.Y. Mar. 2, 2015) (finding that Plaintiff's expert could opine on the cause of a brake failure, in part, based on pictures). In his own capacity as a metallurgical engineer for car manufacturers, Dr. Lynch has reviewed photographs to determine the corrosion resistance of materials. Lynch *Haag* Dep., 224:4-22. Ultimately, neither party disputes that the evidence on which Dr. Lynch relies is a product of reliable principles and methods of evaluation. Instead, HMA disputes whether Dr. Lynch relies on sufficient facts and data to support his conclusions.

i. Dr. Lynch's Reliance on Facts and Data Produced by HMA, HATCI, Mando, and Plaintiff's Experts Renders His Testimony More Reliable.

HMA further argues that Dr. Lynch's opinion as to the materials defect in Class Vehicles is not based on sufficient facts or data because he did not test, observe, or drive the vehicles himself. (Defts. Br., p. 13-14). Rule 703 of the Federal Rules of Evidence, however, does not require Dr. Lynch to rely on his own testing in formulating his opinion.¹¹ "An expert may base an opinion on facts or data in the case that the expert has been made aware of or personally observed. If experts in the particular field would reasonably rely on those kinds of facts or data in forming an opinion on the subject, they need not be admissible for the opinion to be admitted." Fed. R. Evid. 703. The fact that an expert did not personally collect the data or observe the tests, does not affect the relevance or reliability of the testimony. *Gussack Realty Co. v. Xerox Corp.*, 224 F.3d 85, 94 (2d Cir. 2000); *see also Don's Hydraulics, Inc. v. Colony Ins. Co.*, 417 F. Supp. 2d 601, 610 (D. Del. 2006). Courts have read Rule 703 to mean that experts may rely on "facts outside the record and not personally observed, but of the kind that experts in his or her field reasonably rely on in forming opinions." *Asad v. Cont'l Airlines, Inc.*, 314 F. Supp. 2d 726, 740

¹¹ In fact, Defendant's expert, James Walker, did not even look at or test any corroded parts of a Sonata vehicle. (Walker *Miller* Dep., pp. 27-29, Exh. "9" to Graifman Expert Decl.; Walker *Haag* Dep., 43:13-44:20, Exh. "7" to Graifman expert Decl.).

(N.D. Ohio 2004) (citing *Barris v. Bob's Drag Chutes & Safety Equipment, Inc.*, 685 F.2d 94, 102 n.10 (3rd Cir. 1982)).

ii. HMA's HATCI Report is Highly Indicting And As Such, HMA Attacks The Veracity of Its Own HATCI Engineers In Seeking To Discredit Lynch's Opinions, which Are Consistent with Its Engineers

At p. 15 of its brief, HMA has the temerity to seek to question Lynch's ability to rely on the findings and analysis of HMA's own engineers who work in the HATCI division of Hyundai. First, it is inaccurate to refer to them as a mere "non-party." HATCI is affiliated with HMA as a division of HMC and serves as its research arm. Indeed in the recent case, *Little v. Kia Motors America, Inc.*, the Court noted with approval that the expert there, Scott King, reached his conclusion by relying on defendant's technical analysis of the brake defect *including* HATCI-type documents.¹² HMA's only avenue to fight Dr. Lynch's use of Defendant's HATCI materials as support for his own findings, is for HMA to refute the obvious conclusion reached by its own engineers:

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

To the extent that HMA disagrees with Dr. Lynch's conclusions, it can attempt to discredit him through cross-examination. HMA has not shown that Dr. Lynch's conclusions are "wholly speculative or conjectural... to the extent [Hyundai] contends they are still based on

¹² "To reach this conclusion, King reviewed a standardized industry report; Quality Assurance Field Product Reports and District Parts and Service Manager Reports, drafted by defendant's mechanics and managers throughout the United States; ***defendant's Technical Assistance Center Incident Reports***; Technical Service Bulletins; and defendant's warranty brake claims data." *Little v Kia Motors Am., Inc.*, 455 N.J. Super 411, 419, 190 A.3d 502, 506 (App. Div. 2018) (emphasis added); *See also, Samuel-Bassett v Kia Motors Am., Inc.*, 613 Pa. 371, 432-33, 34 A.3d 1, 37 (2011) (reliance by expert on same internal reports to support opinion allowed).

unfounded assumptions, such contentions ‘go to the weight, not the admissibility, of the testimony.’” *Great N. Ins. Co. v. Power Cooling, Inc.*, Case No. 06-CV-874, 2007 U.S. Dist. LEXIS 95912, at *34 (E.D.N.Y. Dec. 18, 2007) (quoting *Boucher v. U.S. Suzuki Motor Corp.*, 73 F.3d 18, 21 (2d Cir. 1996)). HMA’s “mere disagreement” with Dr. Lynch’s conclusions “is insufficient to render [his] opinions inadmissible *ipse dixit*.” *Bd. Of Trs. Of the Aftra Ret. Fund*, 2011 U.S. Dist. LEXIS 144382, at *44.¹³ Defendant’s reliance on *LinkCo v. Fujitsu, Ltd.*, 2002 WL 1585551 (S.D.N.Y. July 16, 2002) (Defs. Br., p. 16) is misplaced as there, the expert merely “cited to deposition testimony and did not seek to explain complex technical issues.” *LinkCo* at *2; *see also, BanxCorp. v. Costco Wholesale Corp.*, 978 F.Supp.2d 322-23 (S.D.N.Y. 2013) (explaining why *LinkCo* was limited to its facts). Notably, in *BanxCorp.*, the expert who was challenged, Webster, was the same expert as in *LinkCo*. Defendants’ attempt to bootstrap the prior *LinkCo* opinion was rejected by the Court in *BanxCorp.*, noting “Webster learned from that experience, for he has limited his testimony and report to technical explanation here.” *supra* at 322.

HMA tries a similar tactic here to no avail, by referencing two cases Dr. Lynch has previously testified in. However, both of those cases involved individual personal injury cases where the focus was on the individual product’s causes of failure. Here, where the focus is on class certification, is wholly distinct. In *Jackson v. Jilco Trailer Leasing Co.*, No. A-4853-13T3, 2016 N.J. Super. 2016 WL 3525373, at *10-11 (Super. Ct. App. Div. June 29, 2016), which was

¹³ HMA’s point that Dr. Lynch “cannot determine that a significant proportion of vehicles experienced a failure due to premature corrosion” because he does not calculate the rate of corrosion of vehicle components or the failure rate fails for the same reason. Mot. to Exclude Lynch, p.6. Dr. Lynch testifies that a common defect persists in the materials used to manufacture all Class Vehicles. If HMA disagrees that uniform materials do not indicate a uniform defect, it can explain that to the jury through cross-examination of Dr. Lynch. In any event that is a merits issue, not one for class certification. *Banks v. Nissan, N.A.*, 301 F.R.D. 327 (N.D. Ca. 2013).

not a class action, the court noted that Dr. Lynch's expertise as a metallurgist is extensive and impressively credentialed, and solely disallowed him to comment before a *jury* on "the design choices made here by the manufacturer." Moreover, the court allowed Dr. Lynch to testify as a metallurgist about the "material-based physical characteristics of the rivets and their observed condition." The case was brought under the N.J. Products Liability Act, *N.J.S.A. 2A:58C-1 to-11*, which has specific requirements as to proofs.

Similarly, the *Kuhar* case was brought under the N.J. PLA as well and involved one product, a safety harness' failure causing injury to plaintiff and Dr. Lynch's opinion was not submitted for the purposes of opining on commonality in a class certification motion. Moreover, it does not appear that there was the same mountain of prior testing, analysis, inspection and data available in *Kuhar*, as it is in the within matter, as discussed in great detail above.

Accordingly, the opinions, methodology and review herein have nothing to do with those two matters and the attempt to somehow bootstrap HMA's challenges herein by using other cases with wholly dissimilar facts, methods, data and procedural posture should be rejected.

Dr. Lynch's independent analysis of the defect is far from the expert analysis offered in *Marvel Characters, Inc. v. Kirby*, 726 F.3d 119, 136 (2d Cir. 2013) which HMA cites in support of its contention that Dr. Lynch's testimony is hearsay. In that case, two historians opined on conversations with artists who contracted with Marvel to conclude whether those particular artists understood their agreements with Marvel Comics in a particular way. Their analysis consisted of repeating conversations and going beyond their areas of expertise to perform essentially psychological assessments of the artists' mental states. *Id.* Because HMA does not dispute that Dr. Lynch derived his "conclusions on reliable results from tests conducted by independent consultants and observed by representatives of numerous interested parties[,]"

HMA's argument that Dr. Lynch's sources were not sufficient goes to the weight, rather than the relevance or admissibility, of his testimony. *Cedar Petrochemicals, Inc.*, 769 F. Supp. 2d, at 285.

II. DR. LYNCH REASONABLY APPLIES SCIENTIFIC PRINCIPLES AND STANDARDS

Defendant's main argument about the reliability of Dr. Lynch's testimony echo its arguments above, volunteering a list of testing and calculations he did not perform. Defendant efforts to discredit Dr. Lynch's testimony by ignoring the extensive research already conducted by experts following principles and standards established by Defendant all the while mischaracterizing Plaintiffs' breach of warranty and deceptive trade practices for one of negligent design. *See* Mot. to Exclude Lynch, p. 18. Because Defendant has failed to meet its burden in seeking the exclusion of Dr Lynch's testimony, Defendant's motion should be denied.

Dr. Lynch has reasonably applied HMA's reports and testing performed by HATCI, Mando, Mr. McLellan, and Mr. Sullivan to the instant case because he has not "unjustly extrapolated from an accepted premise to an unfounded conclusion" or failed to account for "obvious alternative explanations" for the problem at issue. *Northbrook NY, LLC*, 2012 U.S. Dist. LEXIS 134699, at *11-12. This is not a case where an expert applied a completely unrelated test to a case or did not explain his rational. Unlike in *Heisler*, a case in which the Plaintiff's expert performed tests without providing "any reliable foundation upon which to base opinions about the common defect," Dr. Lynch's testimony relied on extensive testing performed by HATCI, including the Electron Dispersive Spectroscopy, mechanical, and chassis and dynamometer testing that HATCI, Mr. McLellan, and Mr. Sullivan conducted. *See Heisler v. Maxtor Corp.*, No. 5:06-CV-00634-JF PSG, 2011 U.S. Dist. LEXIS 43380, at *22 (N.D. Cal. Apr. 20, 2011). As explained above, these tests are widely understood to meet the industry standard for testing. *See, generally*, I.A.

Additionally, Defendant's attempt to disqualify Dr. Lynch's testimony based on his prior appearances is misplaced. In addition to the reasons set forth above, in *Jackson v. Jilco Trailer Leasing Co.*, Dr. Lynch attempted to prove that a part which he had never designed in a trade where he did not know the norms or design standards contained a design defect. *supra*, at *10-11. Here, Dr. Lynch opines on a materials defect in an automotive part based on his forty-five years of experience selecting the materials used to manufacture automotive parts. As submitted previously, the issue at hand is not a design defect and as such, Defendant's arguments do not control the Court's analysis.

A. Defendant Focuses its Opposition to Dr. Lynch on Inquiries Wholly Irrelevant to the Relevance of Dr. Lynch's Expert Testimony

In an attempt to distance itself from the results of its own independent testing, Defendant argues that Dr. Lynch has provided no "reliable standard" on which to base his expert determinations. Defendant asserts the importance of an industry standard by reference to fragmental language from *Daubert* referencing the maintenance of standards controlling "expert's methodology." See Mot. to Exclude Lynch, p. 19. Defendant's arguments are inaccurate and largely irrelevant.

As an initial matter, HMA's excerpted deposition testimony misconstrues both Dr. Lynch's representations and incorrectly alludes to the importance of a single industry standard for the corrosion of brake pads to the reliability of Dr. Lynch's testimony. At his depositions in 2016 and 2019, Dr. Lynch explained that there is no one objective standard, as each organization and company sets its own standards for how components operate in particular conditions. Lynch *Haag* Dep. at 116: 10-16; Lynch *Miller* Dep. at 130:9-20. Defendant incorrectly conflates a lack of objective standard for acceptable corrosion levels with a lack of scientifically supported testing. This argument ultimately ignores that experts such as Dr. Lynch can identify materials

defects in the area of his expertise because “the understanding behind all that is a knowledge of what level of corrosion has proved to be a problem in vehicles and actual use” and because “the company knows” what levels of corrosion are safe based on their own testing. Lynch Miller Depo. at 131: 3-14. It is this same internal and independent testing conducted by Defendant upon which Dr. Lynch based his theories.

Even if Defendant’s assertions that Dr. Lynch did not identify an industry standard were taken as true, it is largely irrelevant to the determination of whether “the reasoning or methodology underlying” Dr. Lynch’s testimony is “scientifically valid.” *Daubert*, 509 U.S. at 592. Out of the breadth of considerations Justice Blackmun details in the opinion of *Daubert*, Defendant keys its focus on language that specifically applies to expert methodology that involves “particular scientific technique.” *Id.* at 594. A review of the excerpted language from *Daubert* makes clear that the standard referred to in this passage relates only to the operation of the techniques used by the expert witness, not the standards applicable to the subject of the expert testimony. *Id.* (“Additionally, in the case of a particular scientific technique... the existence and maintenance of standards controlling the technique’s operation...”). Furthermore, the single case Defendant cites on this matter can be distinguished. In *Zornberg v. CBH Props., Inc.*, the Second Appellate Division of the Supreme Court of New York affirmed the lower court’s grant of summary judgment and did not affirm the exclusion of a report under a *Daubert* analysis, as Defendant alludes. 967 N.Y.S.2d 742, 743 (2d Dep’t 2013). Furthermore, as detailed above, the testing Dr. Lynch relied upon applied Defendant’s own industry standards to identify the corrosion defect.

Moreover, Defendant misstates Dr. Lynch’s theory on the materials defect by mischaracterizing his deposition testimony. At the penultimate question of an approximately 4

hour deposition, defense counsel inquired whether in Dr. Lynch's opinion, the brake components in his report were defective if they did not last 15 years. Lynch *Miller Dep.* at 152:12-17. Dr. Lynch's response, stating that if the brake components did not last at least five years or 60,000 miles, he would say that they are defective. *Id.* at 152:20-22. Dr. Lynch's theory is not tied to the length of a warranty period, as Defendant claims, but instead on the materials Defendant used in manufacturing the relevant brake components. Dr. Lynch makes this point clear in the portion of his penultimate answer that Defendant did not cite, "[m]ore specifically, there were some that didn't last one year or 12,000 miles very, very early failure." *Id.* at 152:22-24. Because Defendant premises its discussion regarding Dr. Lynch's analysis of "other factors" on this non-existing length of warranty-based theory, the arguments presented there should similarly be denied.¹⁴

None of HMA's arguments, therefore, bear on the relevance and reliability of Dr. Lynch's testimony as it applies in this case. Dr. Lynch's testimony need only be relevant and reliable in helping the jury determine a fact in issue. *See* Fed R. Evid. 702. As explained previously, the testing relied on rests on reliable foundations widely accepted. *See, generally*, I.a. Here, the facts at issue are whether a materials defect existed in Class Vehicles and whether HMA knew or should have known about the defect.

¹⁴ Even were the Court to find Defendant's discussion relevant, the cases Defendant cites are wholly distinguishable. In *In re Ford Motor Co. Vehicle Paint Litig.*, the Eastern District of Louisiana denied certification due to a lack of predominance because the expert's testimony indicated that no paint peeling would occur even when a paint primer was applied, the alleged defect. 182 F.R.D. 214, 220 (E.D. La. 1998). *In re Motor Co.* does not incorporate any *Daubert* analysis and is thus inapplicable to the present case. *Kuhar v. Pretzl Co.*, 2018 WL 70-7 1319 (D.N.J. Nov. 27, 2018) is also distinguishable because the specific point Defendant addresses relates to the Court's determination that Dr. Lynch did not refute "other potential causes," as opposed to contributing factors in the present case, which Dr. Lynch acknowledged exist. 2018 U.S. Dist. LEXIS 205437, at *19 (D.N.J. Nov. 27, 2018). This same distinction appears in *Wills v. Amerada Hess Corp.*, where the Court found that the expert had failed to satisfy any of the *Daubert* factors. 379 F.3d 32, 50 (2d Cir. 2004). In addition, the Court found that the expert had failed to account for "possible causes." *Id.* In the present case, Lynch clearly identified the possible causes. *Raskin v. Wyatt* does not control for this same reason as well as the added reason that the case relates to age discrimination and not materials defects.

B. Dr. Lynch's Theory Specifically Addresses the Material Issues of Plaintiffs' Claims

Dr. Lynch used his metallurgical and engineering expertise to put together a cohesive theory that the Sonata brakes suffered from a materials defect based on the reports and testing of the very components at issue or virtually identical components. *See, generally*, I.A. Far from making unjust extrapolations, Dr. Lynch's knowledge of materials selection in automotive parts and his application of corrosion tests and observations performed outside of the context of litigation on the particular materials at issue to the instant case establishes the reliability of his Report. *Daubert v. Merrell Dow Pharm.*, 43 F.3d 1311, 1317 (9th Cir. 1995) (finding "legitimate, preexisting research unrelated to the litigation" reliable). Dr. Lynch also considers obvious alternative explanations of the corrosion, such as differences in the distribution of winter road salts; however, the weather does not supersede the primary cause of the defect – the materials selection of Hyundai.

The relevant questions to the trier of fact are not what should occur in the absence of the defect identified by Dr. Lynch and Defendant's own independent testing, but instead, what common causes lead the components to corrode to the point that they manifest these symptoms and whether Defendant concealed the defect from consumers before the end of the Warranty. HMA argues that Dr. Lynch must calculate how often corrosion leads to the replacement of the brake component, but that is not the case for a breach of warranty claim. *See* Mot. to Exclude Lynch, p. 23. HMA's "compliance with its own standards, not industry standards" is what Dr. Lynch must evaluate. *LaSalle Bank Nat'l Ass'n v. CIBC Inc.*, 2012 U.S. Dist. LEXIS 18503, at *45 (S.D.N.Y. Feb. 14, 2012). Here, Dr. Lynch shows that the brake components do not comport with HMA's standards internally or the Warranty. HMA's own engineering specification provides that the "[REDACTED]

[REDACTED]

[REDACTED] See Lee Dep., 42:8-17; *see also*, Excerpt of Engineering Spec., Exh. “18” to Class Cert Motion. HMA’s Warranty also covers the specific brake components involved herein – brake rotors, calipers, slider clips and carriers – for 60,000 miles or 60 months of repair for materials defects. Class Vehicles’ Basic Warranty Excerpts Compendium, Exh. “11” to Class Cert Motion. Yet, based on the evidence, Dr. Lynch found that the materials used to manufacture the brakes corrode to the point of failure before either of these points. Lynch Report, p. 14.¹⁵

Moreover, if HMA knew or should have known that a materials defect would likely cause the components to corrode to the point of failure before the end of the Warranty, let alone their expected lifespan, then HMA engaged in unfair and deceptive trade practices by intentionally masking the problem and not informing owners of the defect. Dr. Lynch reviewed HATCI, Hyundai, Mando, and Mr. McLellan and Mr. Sullivan’s studies and reports on failed Class Vehicle components before both the end of the Warranty and the expected lifespan of the components and, as discussed *supra*, determined that the studies and reports indicated that the corrosion occurred due to a materials defect. The materials could not sufficiently resist corrosive conditions during the relevant time period and, instead, became transformed into iron oxide that caused judder, pulsation, squealing, and seizing. *See, generally*, Lynch Report. Any of these symptoms constitute a material failure that either requires Warranty coverage because it affects the vehicles’ drivability. *See also* Lynch Haag Dep., 49:13-25. Dr. Lynch explains that the tests performed by HMA and Mando informed HMA that the [REDACTED]

¹⁵ [REDACTED]

[REDACTED]

[REDACTED] the expected lifespan of these components.

III. MR. LYNCH'S OPINIONS ARE WELL WITHIN HIS AREA OF EXPERTISE

HMA contends that Dr. Lynch is not qualified to offer an opinion on whether the repairs at issue should have been covered under the Limited Warranty. According to HMA, Mr. Lynch does no more than “summarize[] the contents of the Limited Warranty” then concludes without basis that HMA wrongfully refused to honor the Limited. Deft. Br. at 25. But this is inaccurate. Mr. Lynch’s opinion that the alleged defects should have been covered by the Limited Warranty is premised upon his opinion that the parts at issue are failing because they are defective in their incorporation of inadequate materials,” Lynch Report at 38 (parts at issue “are defective in that the materials uses in these components do not account for [normal corrosion conditions] ...” a prerequisite for warranty coverage. In other words, Mr. Lynch is not offering an opinion on “warranty issues,” but rather an opinion on product defect. As discussed at length herein, Mr. Lynch is amply qualified to offer an opinion on whether a brake component is defective in material.

CONCLUSION

For the reasons wet forth herein, HMA’s motion to exclude Plaintiffs’ experts should be denied.

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Respectfully submitted,

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